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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/262,834	10/03/2002	Christoph Ochsner	Q71917	4684

7590 04/03/2007
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EXAMINER

JUNG, MIN

ART UNIT	PAPER NUMBER
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2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary

Application No.

10/262,834

Applicant(s)

OCHSNER, CHRISTOPH

Examiner

Min Jung

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The present invention recites 'the network node removing the majority of the protocol data from the data stream'. However, the specification does not teach any details regarding the portion (majority) of the protocol data removed. Specification describes that there are four protocol processing units PL1 to PL4 which process the communication protocols of layers 1, 2, 3, and 4. It is not clearly understood what are the protocol data that are removed. First of all, it is not clearly taught if the 'protocol processing' is the same function as the 'protocol data removal', and if 'protocol data removal' is only a part of 'protocol processing' function, then the protocol processing function need to be described in full for the system to be enabling. It seems that the invention need to include some further processing of overhead information rather than simply removing the protocol data. Regarding the ambiguity of the term "majority", it is not described whether the term "majority" means more than half of the bytes from the

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header is removed, more than half of the layer-specific information from the seven layer protocol is removed, or something else?

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Huitema et al., US 2002/0073215 (Huitema).

Huitema discloses a method and system for transmitting encapsulated Ipv6 data packets. Regarding the present claims, Huitema teaches transmission of data via a communications network (Internet 320) to a terminal (terminals 340, 350, or 360) via network node (DSL modem 390 and Ipv4/Ipv6 filter 410). When data stream is received which consists of useful data and protocol data (Ipv6 data packet embedded in Ipv4 data packet), the network node (DSL modem 390 and Ipv4/Ipv6 filter 410) removes some of the protocol data from the data stream (the Ipv4 header information and all other data relating to the Ipv4 packet are stripped), and the remaining data is switched in the direction of the terminal. See paragraphs [0023] – [0025].

Claim Rejections - 35 USC § 103

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-4, and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huitema in view of Jonsson et al., US 2002/0146000 (Jonsson).

Regarding claims 2 and 6, Huitema fails to specifically teach the processing of protocol layers 1 to 4. Huitema, however, specifically teaches the processing of network layer packet (layer 3) since ipv4/ipv6 header processing is disclosed. Processing of protocol layers at a network node such as switches and network interfaces is well known in the art. Jonsson shows protocol stack at terminal side and network side illustrating layer 1 (physical layer), layer 2 (data link layer 120, 150), layer 3 (network layer 125, 130, 135, 155, 160, and 165), and layer 4 (140). See Fig. 1. Depending on the design and need of the system, a different number of layers are processed by a node. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to implement the teaching of Huitema by employing the protocol layer processing of up to layer 4 as shown by Jonsson and also as widely known in the field of the invention, to perform the processing of the protocols of layers 1 to 4 to provide the output as an application ready data.

Regarding claims 3 and 7, Huitema fails to specifically teach the communication being performed on a point-to-point protocol. Jonsson, however, teaches point-to-point protocol. See [0006]. It would have been obvious for one of ordinary skill in the art at the

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time of the invention to implement the teaching of Huitema by employing the well-known point-to-point protocol to satisfy the network need.

Regarding claim 4, the combined teaching of Huitema and Jonsson is silent on the proportion of the received which is reduced by the protocol processing. The amount of reduction (or removal) would have been within design options a person having ordinary skill in the art would have. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to choose to have what portion of the protocol data removed depending on different results needed for the network.

Response to Arguments

7. Applicant's arguments filed January 3, 2007 have been fully considered but they are not persuasive.

Regarding the rejection under 35 USC 112, first paragraph, applicant submits that "protocol data processing" and "protocol data removal" are separate functions as described on pages 6 and 7 of the specification. However, the claim language includes a vague limitation; "the removing the majority of the protocol data comprises processing and removing protocol data". Further, regarding the term "majority", it is not disclosed what is meant by this term. If it is not disclosed "what" actually is being removed, one cannot make and use the invention. From the disclosure, it cannot be determined whether a portion of protocol data from each layer is removed, the whole protocol data from some of the layers are removed, certain percentage of bits from the protocol data are removed, or something else?

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Regarding the rejection under 35 USC 102(e), applicant argues that Huitema does not teach the invention, but 'merely discloses a filter 410 which strips away the Ipv4 header information and all other data relating to the Ipv4 packet such that the remaining Ipv6 data packet is delivered to the respective Ipv6 devices'. Examiner maintains her reliance on this teaching for the claim limitation. Although applicant asserts that 'this is quite different from the claimed invention in which the network node removes a majority of the protocol data from the received data stream and switches the remaining data stream to be transmitted [to] the terminal', the way the claim language is recited, Huitema's teaching covers this limitation. Stated from the opposite angle of the rejection above (of the same application of Huitema), Huitema strips (removes) the IPv4 header information and all other data relating to the Ipv4 packet (a majority of the protocol data) from received encapsulated Ipv6 data packets (received data stream), and the remaining Ipv6 data packet is delivered to the respective Ipv6 device (switching the remaining data stream to be transmitted to one of the terminals). The advantage of the present invention the applicants are listing, while helpful in understanding the invention, is not a part of the claimed invention, and therefore, is not relevant in claim analysis.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is 571-272-3127. The examiner can normally be reached on Monday through Friday 9:00 - 5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJ
March 27, 2007


Min Jung
Primary Examiner